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Environmental
Planning &
Landscape
Architecture

Wetland and Wildlife Study

TALL CHIEF GOLF COURSE
King County, Washington

Prepared for:

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December 20, 2004

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TALL CHIEF GOLF & COUNTRY CLUB KING COUNTY, WASHINGTON WETLAND AND WILDLIFE STUDY

December 20, 2004

1.0 INTRODUCTION

This report documents the results of a wetland delineation and wildlife habitat assessment that was conducted on the approximately 205-acre Tall Chief Golf Course property located at 1313 W. Snoqualmie River Road SE in the Fall City area of King County (**Drawing 1**). The site is found in the east half of Section 5, Township 24 North, Range 7 East, W.M., and includes Lots 052407-9002, 052407-9025, and 052407-9026.

The purpose of this report is to: 1) describe the wetlands and wildlife habitats identified on the property, 2) identify conceptual impacts to wetland resources from the proposed development, and 3) describe the conceptual measures that could be implemented to mitigate for wetland impacts.

2.0 GENERAL PROPERTY DESCRIPTION AND LAND USE

The site is currently developed with an existing 18-hole golf course and associated clubhouse that occupy the majority of Lot 052407-9002. The southwestern portion of the site (i.e., Lots –9025 and –9026) as well as the western portion of Lot –9002 are undeveloped and consist primarily of an east-facing slope dominated by an unevenly aged mixed forest. A large north-draining wetland system occupies much of the central portion of Lot –9002 and extends off-site to the south and north. In addition, much of the golf course area in the northeast portion of the site is located within the floodplain of the Snoqualmie River, which is found off-site to the east.

3.0 METHODOLOGY

A general site reconnaissance was conducted on November 12th and 22nd, 2003 (following a significant flooding event) to gain an overall impression of the existing environment. Observations were made of the general plant communities, wildlife habitats, and the locations of potential wetland areas. Present and past land use practices were also noted, as were significant geological and hydrological features. The wetland delineation was subsequently conducted in the fall of 2004 utilizing the methodology outlined in the *Washington State Wetlands Identification and Delineation Manual* (1997). Site visits were conducted on October 14, 18, 19, 21, 28, November 1, 3, and December 15, 2004.

Plant species were identified according to the taxonomy of Hitchcock and Cronquist (1973), and the wetland status of plant species was assigned according to the *List of Plant Species that Occur in Wetlands*, published by the U.S. Fish and Wildlife Service (Reed 1988, 1993). Wetland classes were determined by the U.S. Fish and Wildlife Service's system of wetland classification (Cowardin, *et. al.* 1979).

Vegetation was considered hydrophytic if greater than 50% of the dominant plant species had a wetland indicator status of facultative or wetter (i.e., facultative, facultative wetland, or obligate wetland). Soil on the site was considered hydric if one or more of the following characteristics were present:

- organic soils or soils with an organic surface layer,
- matrix chroma just below the A-horizon (or 10 inches, whichever is less) of 1 or less in unmottled soils, or 2 or less if mottles were present, or
- gleying immediately below the A-horizon.

Indicators of wetland hydrology included, but were not necessarily limited to: drainage patterns, drift lines, sediment deposition, watermarks, and visual observation or evidence of inundation or saturated soils.

An evaluation of the vegetation, soils and hydrology was made at various locations along the interface of wetland and upland. Wetland boundary points were then determined from this information. Wetland boundaries were marked with flagging and surveyed. **Appendix A** contains data sheets prepared for representative locations in both the uplands and wetlands. These data sheets document the vegetation, soils, and hydrology information that aided in the wetland boundary determination.

4.0 RESULTS

Nine wetland areas (Wetland Areas A, B, C, D, E, F, G, H, and I) and one small stream (Stream 1) were delineated on the property (**Drawing 1**). Each of these sensitive areas is described below.

Wetland A

Wetland A is located along the southeast property line and extends into the site to the southeast of the existing clubhouse. The wetland is part of a larger wetland that is located off-site to the east. Vegetation within the main on-site portion of the wetland consisted of a palustrine scrub-shrub plant community dominated by willow (Salix sp.), with spirea (Spiraea douglasii), red-osier dogwood (Cornus sericea), and reed canarygrass (Phalaris arundinacea) also being common. In addition, a strip of palustrine forested vegetation was located along the west edge of the entire wetland (both on and off-site). This strip corresponded roughly with the toe of the adjacent upland forested slope and included western red cedar (Thuja plicata), big-leaf maple (Acer macrophyllum), vine maple (Acer circinatum), salmonberry (Rubus spectabilis), stinging nettle (Urtica dioica), skunk cabbage (Lysichitum americanum), slough sedge (Carex obnupta), and lady fern (Athyrium filix-femina). Vegetation within the main off-site portion of the wetland was dominated primarily by a monotypic reed canarygrass pasture.

At the time of the Fall 2004 field investigations, soils throughout the wetland were saturated to the surface and portions of the wetland contained up to six inches of ponding. Runoff within the wetland generally drains from south to north.

Wetland A appears to meet the definition of a Class 2 wetland according to King County Code since it is greater than one acre in size. Class 2 wetlands currently require a standard 50-foot buffer plus a 15-foot building setback.

Wetland B

Wetland B is located in the vicinity of proposed Lot 7 in the southeastern portion of the site. The wetland is located within a topographic depression in the existing golf course and is separated from Wetland A via a cart path. A culvert located under the cart path provides a high-flow hydrologic connection to a finger of Wetland A that extends onto the site. Vegetation within the wetland consisted primarily of a palustrine scrub-shrub plant community that included vine maple, salmonberry, Himalayan blackberry (*Rubus discolor*), giant horsetail (*Equisetum telmateia*), youth-on-age (*Tolmiea menziesii*), skunk cabbage, slough sedge, lady fern, and young red alder (*Alnus rubra*). At the time of the field investigations, soils within the wetland were generally saturated to the surface.

Wetland B would likely be considered a Class 2 wetland according to King County Code since it appears to have had a hydric soil connection to Wetland A prior to historic filling for the cart path and currently has a high flow connection via a culvert. Class 2 wetlands currently require a standard 50-foot buffer plus a 15-foot building setback.

Wetlands C, D, E, and F

Wetlands C, D, E, and F are located within the golf course in the north-central portion of the site, along the western edge of the floodplain for the Snoqualmie River. The wetlands are all hydrologically connected via culverts located under portions of the course and the existing access road. Most of these wetland areas have been heavily disturbed through historic grading associated with the golf course construction. Soils were generally saturated to the surface within all wetland areas during the field investigations.

Wetland C consisted primarily of a manicured lawn and associated water feature with reed canarygrass, smartweed (*Polygonum persicaria*), and a row of weeping willow (*Salix babylonica*) trees along the edge. The northern portion of Wetland D contained a palustrine forested and emergent plant community that included black cottonwood (*Populus trichocarpa*), Pacific willow (*Salix lasiandra*), red alder, redosier dogwood, black twinberry (*Lonicera involucrata*), Himalayan blackberry, reed canarygrass, and slough sedge. The southern portion of Wetland D consisted primarily of manicured lawn and open water golf course ponds.

Wetlands E and F are located north of the existing access drive. Wetland E consisted of a golf course pond and palustrine scrub-shrub plant community dominated by willow and reed canarygrass. Wetland F was dominated by reed canarygrass with scattered clumps of willow, young red alder, Himalayan blackberry, black twinberry, lady fern and skunk cabbage. This wetland area is part of a larger wetland that extends off-site to the north.

Wetland areas C, D, E, and F would likely all be considered Class 2 wetlands according to King County Code since they appear to be part of a wetland system that is greater than one acre in size. The wetlands would likely not be considered Class 1 since the open water components of the wetlands appear to be primarily artificial. Class 2 wetlands currently require a standard 50-foot buffer plus a 15-foot building setback.

Wetlands G, H and I

Wetlands G, H, and I are located in the northwestern portion of the site. These wetlands all consist of seeps along the hillside. Vegetation within the wetlands was dominated by palustrine forested plant communities that included big-leaf maple, western red cedar, western hemlock (*Tsuga heterophylla*), red alder, vine maple, salmonberry, lady fern, skunk cabbage, and youth-on-age. Soils were generally saturated to the surface during the field investigations.

Wetlands H and I would likely be considered Class 2 wetlands according to King County Code since they are greater than 2,500 s.f. in size and contain a forested wetland class. Wetland G would likely be a Class 3 wetland since it is less than 2,500 s.f. in size. Class 2 wetlands currently require a standard 50-foot buffer plus a 15-foot building setback and Class 3 wetlands currently require a standard 25-foot buffer plus 15-foot building setback.

Stream 1

Stream 1 is located in the southeastern portion of the site. The stream channel is intermittent, eroded, and has an average width of about three feet. Runoff within the channel appears to go subsurface in places. Vegetation within the riparian corridor of the stream was dominated by red alder, Himalayan blackberry, salmonberry, and stinging nettle.

Stream 1 would currently be considered a Class 3 stream by King County since it is intermittent and does not contain salmonid habitat. Class 3 streams currently require a standard 25-foot buffer (plus 15-foot building setback) from the ordinary high water line.

5.0 DEVELOPMENT IMPACTS ON WETLANDS

The proposed residential project has been designed to avoid impacts to wetlands and their buffers (**Drawing 1**). The only potentially unavoidable wetland and/or buffer impacts would occur through road improvements and include: 1) widening of the existing access road between Wetlands D and E, 2) construction of the new access road in the vicinity of the cart path crossing between Wetlands A and B, and 3) improvements to the existing gravel road in the northwest portion of the site for use as an emergency access. All of the remaining wetland and buffer areas on the site would be preserved.

? Not · feasible

6.0 MITIGATION FOR WETLAND IMPACTS

Potential wetland/buffer impacts associated with the road improvements are anticipated to be relatively minor. Mitigation for these impacts, if necessary, would occur through a combination of wetland buffer averaging and replacement of

additional high value buffer areas as appropriate. Due to the likely small amount of wetland/buffer impact, it was determined that protecting additional forested buffer habitat was potentially the best mitigation option. If wetland impacts were larger than anticipated, then on-site wetland creation and/or enhancement would be reviewed.

7.0 WILDLIFE

Wildlife habitats on the site were reviewed during the field investigations.

7.1 Results

Wildlife habitats on the site consisted primarily of the following:

- 1) Unevenly aged mixed upland forest. This habitat type is found throughout the western portion of the site, associated with the east-facing slope. Vegetation included a nearly closed canopy of unevenly aged western red cedar, big-leaf maple, Douglas fir (Pseudotsuga menziesii), western hemlock, and red alder. Many trees were larger than 24" diameter at breast height (dbh), with mature trees common. Understory vegetation varied from open to moderately dense and included sword fern (Polystichum munitum), vine maple, salal (Gaultheria shallon), tall Oregon grape (Mahonia aquifolium), Indian plum (Oemleria cerasiformis), red elderberry (Sambucus racemosa), and hazelnut (Corylus comuta). Habitat features such as snags and downed logs were also common.
- 2) Golf Course. This habitat type occupies most of the site and is found throughout the northeastern, north-central, and southeastern portions of the property. In general, this habitat consisted of manicured lawn with scattered trees and tree lines that included pines (*Pinus* sp.), poplars (*Populus* sp.), bigleaf maple, and Douglas fir.
- 3) <u>Mixed Wetlands.</u> This habitat type is found within a band throughout the north-central portion of the site. Vegetation consisted primarily of a scrubshrub plant community dominated by willow, but also included a variety of smaller forested and emergent components. Also included within this habitat type are several open water ponds associated with the golf course.

A variety of wildlife species typical of rural habitats within the suburban Puget Sound area were observed on the site during the field investigations. However, the number of wildlife species that utilize the site could be expected to be much higher than the number actually observed due to the seasonality and secretive nature of most wildlife species. Bird species observed included the Steller's jay, spotted towhee, winter wren, black-capped chickadee, golden-crowned kinglet, pileated woodpecker (feeding cavities), hairy woodpecker, common raven, American robin, varied thrush, killdeer, mallard, common merganser, hooded merganser, bufflehead, Canada goose, great blue heron, and belted kingfisher. Other observed wildlife species included the black tailed deer, eastern gray squirrel, coyote (scat), Virginia opossum, and Pacific chorus frog.

In addition to the observed species, the project site likely provides habitat for a variety of small mammals such as mice, voles, shrews, bats, weasels, squirrels, and moles that are commonly found within similar habitats. Other mammals that likely utilize the site include the raccoon and mountain beaver, and at least occasionally,

the mountain lion and black bear. Unobserved bird species that likely utilize the property on a regular or occasional basis include the bushtit, dark-eyed junco, rufous hummingbird, brown creeper, northern flicker, black headed grosbeak, Bewick's wren, and a variety of sparrows, warblers, flycatchers, swallows, and nuthatches. Although no raptors or raptor nests were observed during the fall field investigations, the site is probably utilized, at least occasionally, by raptors such as the red-tailed hawk, Cooper's hawk, sharp-shinned hawk, western screech owl, and barred owl. Unobserved reptiles and amphibians that are likely to utilize the site include the garter snake (*Thamnophis* sp.), northern alligator lizard, red legged frog, and a variety of salamanders.

7.2 Threatened and Endangered Species and Habitats

No state endangered, threatened, or sensitive wildlife species or habitats were identified on the during the field investigations.

REFERENCES

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service, Department of the Interior. FWSOBS-70/31.

Ecology, Washington State Department of. 1997. Washington State Wetlands Identification and Delineation Manual.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Hitchcock, C.L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. University of Washington Press. 730 pp.

Munsell Color. 1988. *Munsell Soil Color Charts*. Kollmorgen Instruments Corp., Baltimore, Maryland.

Reed, P.B. Jr. 1988. National List of Plant Species that Occur in Wetlands: Northwest (Region 9). USF&WS Biol. Report 88.

Reed, P.B. Jr. 1993. Supplement to: *National List of Plant Species that Occur in Wetlands: Northwest (Region 9)*. USF&WS Biol. Report 88.

APPENDIX A DATA SHEETS

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Field Investigator(s): ALTMANT	<u>J</u>		Date:	10-18-04
Project/Site: TALL CHIEF		State: WA	_ County: _	KING .
Project/Site: TALL CHIEF Applicant/Owner: LANG	Plan	t Community #/Na	me: <u>TP</u>	4
Note: If a more detailed site description is	necessary, us	e the back of data	form or a fie	eld notebook.
Do normal environmental conditions exist Yes No (If no, explain on betas the vegetation, soils, and/or hydrolog Yes No (If yes, explain on betas the vegetation)	ack) y been significa	•		
India	VEGE	TATION		Indicator
Dominant Plant Species Stat		Dominant Plant S	Species .	
1. Alnus rubra FA	CT	11		
2 Rubus spectabilis FAC	4 5	12		
3 Athrium filix-femina FA	C _H_	13		
4. Carex obnupta of	3L- H	14		
J	Bh H	15		
	<u>cw</u> 4	16		
	C H	17		
8. Equiselum telmatera FA	CW H	18		
9		19		
10	 	20		
Percent of dominant species that are OB is the hydrophytic vegetation criterion me Rationale:	WETTER	_ No		
		ILS		
Series/phase:		Subgroup:	2	
Is the soil on the hydric soils list? Yes	No	Undetermine	ed	
Is the soil a Histosol? Yes No _	🗶 Histic epi	pedon present? Y	es <i>N</i>	lo <u>X</u>
Is the soil: Mottled? Yes No_	X Gleyed?	YesNo	_X	
	Mottle	Colors:		
Other hydric soil indicators:	NI.			
Is the hydric soil criterion met? Yes X	No			
LOW CHROMA				
-		OLOGY		
Is the ground surface inundated? Yes_	No <u>X</u>	Surface water	depth:	
Is the soil saturated? Yes X No		11		
Depth to free-standing water in pit/soil pro		. 4		
List other field evidence of surface inunda	ition or soil sali			
Is the wetland hydrology criterion met? Rationale:		o		
OBSERVATION OF SOI	L SATUR	ATION		
JURISDICTI	ONAL DETER	MINATION AND F	RATIONALE	-
Is the plant community a wetland? Yes	× No			
Rationale for jurisdictional decision:				
ALL '3 CRITERIA ME	T			
1 This data form can be used for the Hydr Assessment Procedure. 2 Classification according to "Soil Taxonor		nent Procedure and	d the Plant	Community

Field Investigator(s): ALTMAN Project/Site: TALL CHIEF	<u> </u>	States WA	Date:1	0-18-04 FING	
Applicant/Owner: LANG	Diag	State:	County: _	1 1.00	<u>·</u>
Note: If a more detailed site descrip	tion is necessary, us	e the back of data f	orm or a fie	kt natebook.	
Do normal environmental conditions Yes No (If no, explain Has the vegetation, soils, and/or hyd Yes No (If yes, explain	on back) Irology been significa	•	:		
		TATION		Indicator	,
Dominant Plant Species	Indicator Status Stratum	Dominant Plant S	nacias		Stratum
C-1					- Challing
1. Acer Macrophyllum 2. Rubus discolor	FACU G	11			
3. Fulus spectabilis	FAC+ Z	12			
4		14			
5					
7		17			
7 8		18			
9		19			
10					,
Percent of dominant species that a					
is the hydrophytic vegetation criteri	on meir ites	No X		<u> </u>	
Rationale: 750% FAC 0	R WETTER				
				,	
		ILS	•		
Series/phase:		Subgroup:2			
Is the soil on the hydric soils list?	Yes No	Undetermine	d		
Is the soil a Histosol? Yes	No 4 Histic epi	pedon present? Ye	's N	> <u>x</u>	
	No <u>*</u> Gleyed? — Mottle				
Other hydric soil indicators:		Colors:			
Is the hydric soil criterion met? Ye					
Rationale*	13 110 <u>/</u>	•			
HIGH CHRUMA					
	UVDD	OLOGY			
	-				
is the ground surface inundated?		Surface water o	depth:	<u> </u>	
Is the soil saturated? Yes					
Depth to free-standing water in pit/s List other field evidence of surface is					
List offiel field evidence of surface i	ionoation of soil salt	mation.			
Is the wetland hydrology criterion m	et? YesN	o <u>*</u>			
NO OBSÉRVATIUN OR	EUIDENCE O	F SILL SATU	RATION	OR PONDING	
	DICTIONAL DETER				The state of the s
Is the plant community a wetland?	Yae Ma X	•			
Rationale for jurisdictional decision:	165				
1 This data form can be used for the	Hudric Sail Assass	ant Procedure and	the Plant C	iommunity .	
This data form can be used for the Research Procedure. 2 Classification according to "Soil Ta		ient Lioceonie sud	nie riant C	onimonity	
_	-				

Field Investigator(s): AUMAG	<u> </u>		Date: 10-	-18-04	
Project/Site: TALL CHIEF		- State: WA	- County: F	126	
Applicant/Owner: hAn6		Plant Community #/Na	me:		
Note: If a more detailed site descrip	otion is necessary	, use the back of data	form or a field r	notebook.	
Do normal environmental conditions Yes No (If no, explain Has the vegetation, soils, and/or hy Yes No (If yes, explain	n on back) drology been sign n on back) ————————	-			
	Indicator			Indicator	
Dominant Plant Species	Status Stratu	ım Dominant Plant S	Species ,	Status	Stratum
1 Salix lasiandry	PACW+ T	5 11			
2. Spiraley Douglassii	FACW 5	12			
3 Cornus Sericea	FACW S	13			
4 Urtice divices	FAC+ H	14			
5. Solanum dulcamara		15			
6.					
7			1		
8					
9.					
10.					
Percent of dominant species that a	ire OBL, FACW, a	na/or FAC 100	<u>′o</u>		
Is the hydrophytic vegetation criter	ion met? Yes _#	NO			
Rationale: > 50% FAC OR	WETTER		90 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		SOILS			
Series/phase:		Subgroup:	2		
Is the soil on the hydric soils list?	Yes No	Undetermine	ed		
Is the soil a Histosol? Yes	No X Histic	epipedon present? Y	es No×		
Is the soil: Mottled? Yes	No × Gleye	d? Yes No	×		
Matrix Color: 10 YR 3/1		ttle Colors:			
Other hydric soil indicators:					
Is the hydric soil criterion met? Ye	es_ <u>x</u> No				
Rationale:					
LOW CHROMA					
	HY	DROLOGY			
In the manual and a land date do	•		F 45 -		
is the ground surface inundated?		X Surface water	gebtu:	,	
Is the soil saturated? Yes X	No	<u>د ۱</u>			
Depth to free-standing water in pit/s List other field evidence of surface					
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Is the wetland hydrology criterion m	et? Yes X	No			
OBSERVATION OF	SOIL SATU	ration			
JURIS	DICTIONAL DET	ERMINATION AND F	RATIONALE		
Is the plant community a wetland?	Yes X No				
Rationale for jurisdictional decision:					
ALL 3 CRITERIA	MET				
1 This data form can be used for the		coment Procedure as	d the Plant Cam	mundu	
Assessment Procedure. Classification according to "Soil Ta		enain Lioceonte SU	o me tiani con	шинц	-
The second according to contrib					

Field Investigator(s): AUTMAN	<u> </u>			Date:	10-1	8-04	
Project/Site: TALL CHIEF			State:	A County	1: F1	NO	
Applicant/Owner: LANG Note: If a more detailed site descrip	tion is nec	essary, us	t Community e the back o	/ #/Name: f data form or :	a field not	tebook.	
Do normal environmental conditions Yes No (If no, explain Has the vegetation, soils, and/or hyd Yes No (If yes, explain	on back) Irology bee	•		od?			
•	Indicator		ИОПАТ			Indicator	
Dominant Plant Species	Status		Dominant F	Plant Species			Stratum
1. Alnus rubra 2. Curylus comuta	FAC	T	11				
3. Polystichum munitum	FACU	5	13				
4							
5		: ———					
6 7	***************************************		16	-			
8			18				
9			19			•	
10							<u> </u>
Percent of dominant species that are ls the hydrophytic vegetation criterion Rationale:	e OBL, FA	ACW, and/ Yes	or FAC No_ 	<u> 53 7 ° </u>			
Rationale: 7 > 50% FAC	OR (いなイナモ	٤				
	•		ILS				
Sarias/abasa:				.raua.2		**	
Series/phase: Is the soil on the hydric soils list? Is the soil a Histosol? Yes	Yas	Nn	Undet	group.~ armined			
Is the soil a Histosol? Yes	No.X	Histic epi	oedon prese	nt? Yes	No X		
Is the soil: Mottled?, Yes	No Y	Gleyed?	Yes	No <u>X</u>	-		
		Mottle	Colors:	7			
Other hydric soil indicators: Is the hydric soil criterion met? Ye		No X					······································
Rationale:	·	NO	•				
HIGH CHROMA							· · · · · · · · · · · · · · · · · · ·
		HYDR	OLOGY				
Is the ground surface inundated?	Yes	No X	Surface	water depth: -		_	
Is the soil saturated? Yes	No X	_					
Depth to free-standing water in pit/s							
List other field evidence of surface in	nundation	or soil sati	uration.				
Is the wetland hydrology criterion me Rationale:							
NO OBSERVATION OR	EUIDEN	CE OF	- 5010	SATURATIO	ay 60	r Poni	3146
JURISI	DICTIONA	L DETER	HOITANIM	AND RATION	ALE		
Is the plant community a wetland?	Yes	No %	pi				
Rationale for jurisdictional decision:			·				
NO CRITERIA MET							
1 This data form can be used for the Assessment Procedure.	Hydric So	il Assessm	nent Procedi	ure and the Pla	int Comm	nunity	
² Classification according to "Soil Ta	xonomy."						

Field Investigator(s): AUTMANN		·	· (A	Date: _	10-18-	-oy	
Project/Site: TALL CHIEF		State: _	WA	County:	FIN	Ø	
Applicant/Owner: LANG Note: If a more detailed site description is nec	essary, us	t Comm e the ba	unity #/Na ck of data 	me: form or a f	lield notet	oook.	
Do normal environmental conditions exist at the Yes X No (If no, explain on back) Has the vegetation, soils, and/or hydrology becomes No X (If yes, explain on back)	•						
Indicator	VEGE	ИОПАТ			!	Indicator	
Dominant Plant Species Status	Stratum	Domina	ant Plant S	Species		Status	Stratum
1. Salix lasiandra FACWI			·	·			
2. Cornus Serices FACW	5						
3. Bidens sp FACW	Н		•				
4. Athrew filix-femine FAC		14					
5. Urtica dioica ract	H_						
6. Ranunculus repens PACW 7. Impatiens ~ racw	_H _	,					
7. Impatiens ~ FACW	H						
9		19					
10			· · · · · · · · · · · · · · · · · · ·				
Percent of dominant species that are OBL, FA Is the hydrophytic vegetation criterion met?	Yes X	or FAC _ _ No	100	%			· · · · · ·
Rationale: >50% FAC OF WETTER	<u> </u>						
		ILS					
Social/abase:				2			
Series/phase: Is the soil on the hydric soils list? Yes			Subgroup: ⁽ Idetermine				
			resent? Y		No_X_		
Is the soil: Mottled?, Yes X No	Gleyed?	Yes _	No	<u>X</u>		-	
Matrix Color: 10 YR 4/1	Mottle	Colors:	VARIO	عر			
Other hydric soil indicators:							
Is the hydric soil criterion met? Yes 🔀	No	-					
LOW CHROMA WITH MOTTLES	· . · · · · · · · · · · · · · · · · · ·						
	HYDR	OLOGY					
Is the ground surface inundated? Yes				deoth:			
Is the soil saturated? Yes "X No							
Depth to free-standing water in pit/soil probe h	ole: SAT	PATED	AT SURF	ACE, N	S WATER	ואאי	
List other field evidence of surface inundation	or soil satu	uration.					
Is the wetland hydrology criterion met? Yes Rationale:		o					
OBSERVATION OF SOIL SA	TURAT	102					
JURISDICTIONA	L DETER	OTANIM	ON AND F	RATIONAL	.E		
Is the plant community a wetland? Yes _≺	No						
Rationale for jurisdictional decision: ALL 3 CRITERIA MET							
1 This data form can be used for the Hydric So Assessment Procedure. 2 Classification according to "Soil Taxonomy."	il Assessm	nent Prod	cedure and	d the Plant	(Commu	rity	

Field Investigator(s): ALTMANN	<u>)</u>	Date; _	10-18-04
Project/Site: TALL CHIEF Applicant/Owner: LANG	Sta	ale: WA County	: FING
Applicant/Owner: LANG	Plant C	ommunity #/Name:	
Note: If a more detailed site descripti	on is necessary, use th	ne back of data form or a	field notebook.
Do normal environmental conditions of Yes X No (If no, explain of Has the vegetation, soils, and/or hydrony Yes No (If yes, explain)	on back) ology been significantly	•	
	VEGETA	ПОИ	1 2 4
Dominant Plant Species	Indicator Status Stratum Do	ominant Plant Species	Indicator Status Stratum
11 5 015 16		I	
	3. P		
3. Demleria resasiformis		2, 3	
1 Symphoricarpos albus	FACU 5 14	4.	
5. Urtice diaice		5	
6 Tulmely menzies"	FAC IT 16	5 	
7. Polystichen munitum	<u>FACU</u> <u>5</u> 17	7	
8		3	
		9	
10.	20)	
Percent of dominant species that are is the hydrophytic vegetation criterio Rationale: Not 7 50% FAC 0		· ×	
	SOILS	6	•
Series/phase:		Subgroup;2	
Is the soil on the hydric soils list?	Yes No	Undetermined	
Is the soil a Histosol? Yes 1	No 🗶 Histic epiped	on present? Yes	No <u>×</u>
Is the soil: Mottled? Yes Matrix Color: 16(R 3/3	√lo_⊁_ Gleyed? Ye	es No <u>_x</u>	
Matrix Color: 101 × 5/5	Mottle Col	lors:	
Other hydric soil indicators: Is the hydric soil criterion met? Yes			
Rationale:	1402		
HIGH CHROMA			
	HYDROL	OGY	
is the ground surface inundated? Y	es No ★	Surface water depth: -	
is the soil saturated? Yes	NO <u>X</u> ON		
Depth to free-standing water in pit/so			
List other field evidence of surface in	undation or soil saturat	ion.	
Is the wetland hydrology criterion me Rationale:		•	
NO OBSERVATION OF E	WIDENCE OF SC	OIL SATURATION OR	- 80NDINP
JURISD	ICTIONAL DETERMIN	ATTON AND RATIONA	LE
Is the plant ∞mmunity a wetland? `	Yes No		
Rationale for jurisdictional decision:	110		Z. Z
This data form can be used for the Factorian Assessment Procedure. Classification according to "Soil Tax		t Procedure and the Plan	nt Community
Chassination according to collinat	01101119.		

Project/Siries	Field Investigator(s): ACTMAN	<i>.</i> .				Date:	11-3-04	
ApplicantOwner: Plant Community #Name: Mole: If a more detailed site description is necessary, use the back of data form or a field notebook. Do normal environmental conditions exist at the plant community? Yes	Project/Site ALL CHIEF	•		State: _	WA	County	14126	
Note: It a more detailed site description is necessary, use the back of data form of a field notebook. Do normal environmental conditions exist at the plant community? Yes X No(if no, explain on back) Has the vegetation, soils, and/or hydrology been significantly disturbed? YEGETATION Indicator	Applicant/Owner: LANG		Plan	t Comm	unity #/Na	me:		
Yes No (If no, explain on back) Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes No (If yes, explain on back) No (If yes, explain on back) No (If yes, explain on back) No (If yes, explain on back) No (If yes, explain on back)	Note: If a more detailed site descrip	tion is nece	essary, us	e the ba	ck of data	form or a f	ield notebook.	
Indicator Indi	Yes No (If no, explain Has the vegetation, soils, and/or hyd	on back) Irology bee	,	_				
Dominant Plant Species Status 1. All nus Cobre 2. Pubus Speckets 115 2. Pubus Speckets 115 3. All nus Cobre 4. Tolinics Treasies; FAC 111. 4. Tolinics Treasies; FAC 113. 4. Tolinics Treasies; FAC 113. 4. Tolinics Treasies; FAC 114. 5. Vetica diorec 16. 7. 17. 8. 18. 9. 19. 10. 20. 100 °/60 Is the hydrophytic vegetation criterion met? Yes X No Rationale: Series/phase: Subgroup: 2 Is the soil an Histosol? Yes No Undetermined Is the soil an Histosol? Yes No Undetermined Is the soil and Histosol? Yes No X Gieyed? Yes No X Matrix Color: 1016 °/60 Is the hydric soil criterion met? Yes X No Rationale: No X Gieyed? Yes No X Matrix Color: 1018 °/60 Is the hydric soil criterion met? Yes X No Surface water depth: Is the hydric soil criterion met? Yes X No Pationale: Subgroup of Surface water depth: Is the soil saturated? Yes No X Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in pri/soil probe hole: Subgroup of Surface water depth: Is the welland hydrology criterion met? Yes X No Depth to free-standing water in pri/soil probe hole: Subgroup of Surface water depth: Is the welland hydrology criterion met? Yes X No Depth to free-standing water in pri/soil probe hole: Subgroup of Surface water depth: Is the welland hydrology criterion met? Yes X No Rationale: Observation of Surface inundation or soil saturation. Is the welland hydrology criterion met? Yes X No Rationale for jurisdictional decision: West X No Rationale for jurisdictional decision: Act X Occurrence and the Plant Community Assessment Procedure.			VEGE	TATION	Ī		1. 4	
1. Alaus Cobra 2. Pubus Spectabilis FAC 5 11. 2. Pubus Spectabilis FAC 11 13. 4. Tolmick Marziesii FAC 11 13. 4. Tolmick Marziesii FAC 11 13. 4. Tolmick Marziesii FAC 11 15. 6. 16. 16. 7. 17. 8. 18. 9. 19. 19. 19. 19. 19. 10. 19. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 10. 19. 10. 19. 19. 10. 19. 19. 10. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 10. 19. 19. 19. 10. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	Dominant Plant Species	_	C++	Domin	ant Diant S	Species		Stratum
2. Pubus Speckbults FAC 1 3. 3. Atterioum filip temms FAC 1 13. 4. Tolmic Menzies; FAC H 14. 5. Vitic Storic FAC H 14. 5. Vitic Storic FAC H 15. 6. 16. 7. 17. 8. 18. 9. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100° /o Is the hydrophytic vegetation criterion met? Yes X No Rationale: 7 Sorp, FAC OR DETTER SOILS Series/phase; Subgroup: Is the soil on the hydric soils list? Yes No Undetermined Is the soil and Histosof? Yes No X Histic epipedon present? Yes X No Is the soil Mottled? Yes No X Gleyed? Yes No X Subgroup: Soil S Series/phase: Subgroup: SOILS Series/phase: Subgroup: SOILS Series/phase: Subgroup: Soil S Subgroup: No X Gleyed? Yes No X Subgroup: Mottle Colors: No X Subgroup: Mottle Colors: No X Subgroup: Soil S Subgroup: Soil S Subgroup: No X Surface water depth: Is the soil saturated? Yes X No Surface water depth: Is the soil saturated? Yes X No Surface water depth: Is the soil saturated? Yes X No Surface water depth: Is the soil saturated? Yes X No Surface water depth: Is the wetland hydrology criterion met? Yes X No Saturation. Is the wetland hydrology criterion met? Yes X No Saturation. Is the plant community a wetland? Yes X No Saturation. Soil S Saturated? It has data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.								
3. Advance Marker 13. 4. Tolmics Mensions 15. 5. Vitica orotica from 115. 6. 16. 7. 17. 8. 18. 9. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100 % o	1. Phos tobes							
4. Televice Marelesii Mac M 14. 5. Vrtice Scotce Mac M 15. 6. 16. 16. 7. 17. 8. 18. 9. 19. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100°/o Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls Sories/phase: Subgroup: Solls Solia Histosol? Yes No Undetermined Is the soil on the hydric soils list? Yes No Undetermined Is the soil and Histosol? Yes No X Histic epipedon present? Yes X No State of the hydric soil indicators: Is the hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: Soli Active of the hydric soil criterion met? Yes X No Rationale: Soli Active of the hydric soil criterion met? Yes X No Rationale: Soli Active of the hydric soil criterion met? Yes X No Rationale: Soli Active of Soli Active Office of Soli Active Office of Soli Active Office	2. All count lice demine	FACT	-3-	12. —				
5. VrAcc ocoscs Mach 15. 16. 7. 17. 17. 18. 9. 19. 19. 10. 20. 20. 20.	1 Tolmies Menzies:	FAC	- N					
6. 16. 17. 17. 8. 18. 9. 19. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100°/o Is the hydrophytic vegetation criterion met? Yes X No Rationale: SOILS Series/phase: Subgroup: S		FACK	W					
7	6			16				
9. 19. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100°/o Is the hydrophytic vegetation criterion met? Yes X No Rationale: SOILS Series/phase: Subgroup: Subgroup: Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No Is the soil: Mottled? Yes No Gleyed? Yes No X Matrix Color: 100° 2/1 Mottle Colors: Other hydric soil indicators: Is the hydric soil dicterion met? Yes X No Rationale: Low CHRUMA - HISTIC EPIPEDON HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in prit/soil probe hole: Surface List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: Surface Inundation or Soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale for jurisdictional decision: Accordance of Surface Inundation of Soil Saturation Accordance of Surface Inundation of Soil Saturation Accordance Inundation Accordance	7			17. —				
9. 19. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100°/o Is the hydrophytic vegetation criterion met? Yes X No Rationale: SOILS Series/phase: Subgroup: Subgroup: Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No Is the soil: Mottled? Yes No Gleyed? Yes No X Matrix Color: 100° 2/1 Mottle Colors: Other hydric soil indicators: Is the hydric soil dicterion met? Yes X No Rationale: Low CHRUMA - HISTIC EPIPEDON HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in prit/soil probe hole: Surface List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: Surface Inundation or Soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale for jurisdictional decision: Accordance of Surface Inundation of Soil Saturation Accordance of Surface Inundation of Soil Saturation Accordance Inundation Accordance	8			18				
Percent of dominant species that are OBL, FACW, and/or FAC 100°/6 Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls Solls Series/phase: Subgroup: Subgro	9			19				-
State hydrophytic vegetation criterion met? Yes X No Rationale: Solls Solls	,							
Solls Series/phase:	 Is the hydrophytic vegetation criteria 	on met? 📑	Yes 💢 🏻	or FAC . _No		lo		
Series/phase:	75090 TAC OR	werter		-				
Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No Is the soil: Mottled? Yes No Gleyed? Yes No Mottle Colors: Other hydric soil indicators: Is the hydric soil criterion met? Yes No Rationale: Low CHRUMA - HISTIC EPIPEDON HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes No No Rationale: OBSEPUATION OF SOIL SMULATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes No No Rationale for jurisdictional decision: ALC 3 CALLERAN NO HYDROLOGY This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.			. sc	ILS	-			
Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No Is the soil: Mottled? Yes No Gleyed? Yes No X Matrix Color: 1018 2/1 Mottle Colors: Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: Low CHRUMA - HISTIC EPIPED ON HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in pit/soil probe hole: Surface water depth: Is the wetland hydrology criterion met? Yes X No Rationale: OBSEPUATION OF SOIL SMULATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes No Rationale for jurisdictional decision: ALC 3 CALLERAN MET NO This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	Series/phase:				Subarouo:	2		
Matrix Color: 101 2/1	Is the soil on the hydric soils list?	Yes	No	Ur	ndetermine	ed		
Matrix Color: 101 P 2 Mottled Colors: Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: Low Chruma - Histic Eripedon HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in pit/soil probe hole: Surface List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSEPUNTION OF SOIL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA WET	Is the soil a Histosol? Yes	No X	Histic epip	bedon p	resent? Y	es X	No	
Other hydric soil indicators: Is the hydric soil criterion met? Yes X No	is the soil. Mottled (Tes,	NO X	Gleyed?	188	140			
Is the hydric soil criterion met? Yes X No Rationale: LOW CHRUMA - HISTIC EPIPEDON HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSEPUNTION OF SOIL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA MET This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.			Mottle	Colors:				
Rationale: LOW CHROWA - HISTIC EPIPEDON HYDROLOGY Is the ground surface inundated? Yes No								
HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes X No Depth to free-standing water in pit/soil probe hole: Surface List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes No Rationale:		s <u>X</u>	No					
HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes No Surface water depth: Is the soil saturated? Yes No Surface water depth: Is the ried evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes No	LOW CHRUMA - HIC	TIC FI	PIPEDO	7	·····			
Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes No Surface water depth: Depth to free-standing water in pit/soil probe hole: Surface	7 77	110 2						
Depth to free-standing water in pit/soil probe hole:		-					è	
Depth to free-standing water in pit/soil probe hole:	is the soil enturated?	Yes	No _ <u>^</u>	Sun	ace water	debiu: —		
List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSEFUNTION OF SOIL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA WET 1 This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	Depth to free-standing water in pit/s	oil probe by	ole	SURFA	1CE			
Is the wetland hydrology criterion met? Yes X No Rationale: OBSEFUNTION OF SOIL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CAITERIA WET This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	List other field evidence of surface in	on proce in nundation o	or soil satu	ration				
Rationale: OBSEFUATION OF SOIL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes Y No Rationale for jurisdictional decision: ALL 3 CRITERIA WET 1. This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	***							
JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes \(\sum \) No Rationale for jurisdictional decision: ALL 3 CALTERIA WET 1 This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	Rationale:	, -	<u>x</u> N	o	• .			
Is the plant community a wetland? Yes \(\sum \) No \(\sum \) Rationale for jurisdictional decision: \(\sum \) \(\sum	OBSEPUATION OF	- SOIL	SATUR	ATION)			
Pationale for jurisdictional decision: ACC 3 CALTERIA MET 1 This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	JURISI	ОІСПОНАІ	L DETERI	ПАИ	ON AND F	RATIONAL	E	
Pationale for jurisdictional decision: ACC 3 CALTERIA WET 1 This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	Is the plant community a wetland?	Yes X	No					
1 This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.	Rationale for jurisdictional decision:							
Assessment Procedure.	ALL' 3 CRITERIA	MET						
	Assessment Procedure.		l Assessm	ent Pro	cedure an	d the Plant	Community	

Field Investigator(s): ALTMANN	Dat	e: <u>11-3-04</u>
Project/Site: IFLU CHILL	- State: WA Cou	INV: FING
Applicant/Owner: LANG	Plant Community #/Name: _	
Note: If a more detailed site description is necessar	, use the back of data form	or a field notebook.
Do normal environmental conditions exist at the plar Yes No (If no, explain on back) Has the vegetation, soils, and/or hydrology been sig Yes No (If yes, explain on back)	-	
	EGETATION	9 1° 4 .
Dominant Plant Species Status Stra	um Dominant Plant Specie	Indicator s Status Stratum
1. Acer macrophyllum FACU		
2. Rhamnus purshiana FACT 3. Rubus Spectabilis FACT 5		
4. Polystichum muntum FACU S	13	
	14	
7		
8		
9	20.	
IV	20.	
Percent of dominant species that are OBL, FACW, Is the hydrophytic vegetation criterion met? Yes_Rationale:		
NOT > 50% FAC OR WETTER	ζ	
	SOILS	
Sorias/ahasas		
Series/phase: Is the soil on the hydric soils list? Yes No	Subgroup; ²	
Is the soil a Histosol? Yes No _x Histic	Undetermined	No. of
	epipedon present? Yesed? Yes No 🔀	No <u>X</u>
Matrix Color: 10 18 3 4 M	ottle Colore:	-
Other hydric soil indicators:	ottie colors.	
Is the hydric soil criterion met? Yes No	<	
Rationale:		
HIGH CHROMA		
• •	DROLOGY	
Is the ground surface inundated? Yes No	X Surface water depth	:
Is the soil saturated? Yes No		
Depth to free-standing water in pit/soil probe hole: _		
List other field evidence of surface inundation or soi	saturation.	
Is the wetland hydrology criterion met? Yes Rationale:	No 🔀	
	of Soll SATURATION	ak 6.40146
JURISDICTIONAL DE	TERMINATION AND RATIO	NALE
is the plant community a wetland? Yes N	×	
Rationale for jurisdictional decision:		
NO CRITERIA MET		
	acmont Procedure and the	Plant Community
 This data form can be used for the Hydric Soil Assessment Procedure. Classification according to "Soil Taxonomy." 	essment Procedure and the	riani Community
-		

Field Investigator(s): ALTMA	JN .	Date: 11-3-04
Project/Site: IALL CHIEF	State: INA	- COUNTY FIND
Applican/Owner: LANG	Plant Community #/N	ame:
Note: It a more detailed site descript	ion is necessary, use the back of data	a form or a field notebook.
Do normal environmental conditions Yes No (If no, explain Has the vegetation, soils, and/or hyd Yes No (If yes, explain	on back) rology been significantly disturbed?	
	VEGETATION	
Dominant Plant Species	Indicator Status Stratum Dominant Plant	Indicator
1. Tsuga heterophylk		
0.1.1.1	<u>FACU</u> 5 14	
6.	16	
7	17	
8	18	
	19	
	20	
Is the hydrophytic vegetation criterio	e OBL, FACW, and/or FAC O	·
Rationale: 750% FAC	or wetter	
	SOILS	
		•
Series/phase:	Subgroup	: 4
Is the soil on the hydric soils list? Is the soil a Histosol? Yes	Yes No Undetermin	ed
Is the soil: Mottled? Yes	No <u>X</u> Histic epipedon present? ` No <u>X</u> Gleyed? Yes No	res No_X
Matrix Color: 1018 313	Mottle Colors:	<u>×</u>
Other hydric soil indicators:	TYIOTHI OCIOTS.	
Is the hydric soil criterion met? Ye	s No.❤	
Rationale: HIGH CHRUM		
HIGH CHRUW	1A	
	HYDROLOGY	
Is the ground surface inundated?		r depth:
	No <u>X</u>	
Depth to free-standing water in pit/so		
List other field evidence of surface in	fundation or soil saturation.	
Is the wetland hydrology criterion me Rationale:		
NO OBSERVATION OR	EUIDENCE OF SOIL SATURA	ATION OR PONDING
JURISE	DICTIONAL DETERMINATION AND	RATIONALE
Is the plant community a wetland? Rationale for jurisdictional decision:	Yes No <u>X</u>	
NO CRITERIA MET	**************************************	
1. This data form can be used for the	Hydrin Soil Assessment Procedure as	od the Plant Community
Assessment Procedure.		io and priming many
² Classification according to "Soil Tax	Contonny.	

Field Investigator(s): ALTMAN	147	· = ·		Date:	11-3-04	
Project/Site: TALL CHIEF		State:	WA	County:	KING.	
Applicant/Owner: LANG		Plant Commu	unity #/Nam	e:		
Note: If a more detailed site descrip	ition is necessar	y, use the bac	ck of data to	orm or a fie	ld notebook.	
Do normal environmental conditions Yes X No (If no, explain Has the vegetation, soils, and/or hyd Yes No (If yes, explain	on back) Brology been sig	•				
		EGETATION				
Dominant Plant Species	Indicator Status Stra	tum Domina	ent Plant Sn	acias	Indicator Status	Stratum
1 - 21-						Ottatom
1. Acer circinatura		11. — (5 12. —				
3. Corlos (almosa	FACU Z	12. — 2 13. —	•	·		-
4. Polystichum munitum	FACU S	•				
5. Lysichitum americanus	- OBL					
6. Athyrium filix-feming						
7		17				
8		18				
9		19				
10.						
Percent of dominant species that a is the hydrophytic vegetation criteri	re OBL, FACW, on met? Yes	and/or FAC _ No	<u> </u>	/ 0	-	
Rationale:		OR WE		· · · · · · · · · · · · · · · · · · ·		
	e IAC					
		SOILS				
Series/phase:	V	S	Subgroup:2			
Is the soil on the hydric soils list? Is the soil a Histosol? Yes	Yes No	Un	benimielebi			
Is the soil: Mottled?, Yes	No X Histic	c epipedon pri ed? - Ves	esent/ res No N	, X N	o	
Matrix Color: 10 YR 2/1	M	ottle Colors:	110 /			
Other hydric soil indicators:						
Is the hydric soil criterion met? Ye	s_X_ No_					
Rationale:		0.050	1			
LOW CHROMA -	HISTIC E	PIPEDON	<i>.</i>			
	•	YDROLOGY				
is the ground surface inundated?		Y Surfa	ace water de	epth:		
Is the soil saturated? Yes X Depth to free-standing water in pit/s	No	SUR	FACE			
List other field evidence of surface i	oii probe noie; _					
		. 30101011011.				
Is the wetland hydrology criterion m	et?Yes 🔀	No				
Rationale: OBJERVATION OF	SALL CATUR	AT Ida	· · · · · · · · · · · · · · · · · · ·			
	·····					
JURIS	DICTIONAL DE	TERMINATIC	ON AND RA	MONALE		
Is the plant community a wetland?						
Rationale for jurisdictional decision: SOLLS AND HYDE		(a A	·			
			MET			
This data form can be used for the Assessment Procedure. Classification according to "Soil Ta		essment Proc	edure and	the Plant C	Community	•
· ·						

C

Field Investigator(s): ALTMA	NN .			Date: _	11-3-	04	
Project/Site:			State WA	County.	VIN	6	
Applicant/Owner: LANG		Plan'	t Community	#/Name:			
Note: If a more detailed site descrip	otion is nece	essary, us	e the back of	data form or a f	lield note	book.	
Do normal environmental conditions Yes No (If no, explain Has the vegetation, soils, and/or hyd Yes No (If yes, explain	n on back) drology bee	n significa	ntly disturbed	17	?E		
		VEGE	гаттон				
	Indicator					Indicator	
Dominant Plant Species	Status			ant Species		Status	Stratum
1. Rubus discolor	FACU		11				
2. Sambucus racemosa			12				
3. Phalaris anndinaces			13				
4. Convoludus							
5		:	15				
6			15. ———				
7. ————————————————————————————————————			1/				
9							
10			20				
Is the soil on the hydric soils list? Is the soil a Histosol? Yes Is the soil: Mottled? Yes Matrix Color:	Yes_No_X	Yes SO No Histic epip Gleyed? Mottle	ILS Subgr Undeter Dedon presen Yes Colors:	oup: ² mined t? Yes			
Rationale: SLOPE							
		HYDRO	OLOGY				
Is the ground surface inundated? Is the soil saturated? Yes Depth to free-standing water in pit/s List other field evidence of surface in	No <u>X</u> oil probe h	ole:		ater depth: —			
Is the wetland hydrology criterion m	et? Yes	No	· /-	·			
Rationale: OBSERVATION OR			•	TURATION	GR P	0171N6	
				ND RATIONAL	.E		
is the plant community a wetland?		_					
Rationale for jurisdictional decision: NO CRITERIA MET				·····			
1 This data form can be used for the Assessment Procedure.	Hydric Soi	l Assessm	ent Procedur	e and the Plant	Commu	nity	-
² Classification according to *Soil Ta	xonomy."						

Field Investigator(s): ALTMAN	بن		· · · · · · · · · · · · · · · · · · ·		Date:	1(-3-	<u>04</u>	
Project/Site: TALL CHIEF		;	State:	WA	County:	KING	2	
Applicant/Owner: LANG		- Plant	Commi	unity #/Nan	ne:			
Note: If a more detailed site descrip	tion is neces:	sary, use	the bad	k of data f	orm or a f	ield noteb	ook.	
	_							
Do normal environmental conditions Yes X No (If no, explain Has the vegetation, soils, and/or hydroxy Yes No (If yes, explain	on back) Irology been		-					
,	Indicator	VEGET	МОПА			f	ndicator	
Dominant Plant Species		Stratum	Domina	int Plant Sp	oecies ,	-	Status	Stratum
1. Salix lasiandra	FACUIT							
2 Alnus rubra	FAC							
3 Cornus sericea	FACW			*				
VO 1	FACU	Ś						
[7]) 25 2- 1	FACW	11						
	036	11	15					
		11						
7. Athyrium Filex-ferning								
8			18					
9								
10.			20					
Percent of dominant species that a is the hydrophytic vegetation criteri	on met? Te	s <u>~</u>	r FAC _ No		<u> </u>			
Rationale; 50% FAC 6	r were	ER						
	•	soi	LS					
Carinatahaan				. , 2				
Series/phase:	·		S	ubgroup:2				
Is the soil on the hydric soils list?	Yes	No	Un	determined	ď			
Is the soil a Histosol? Yes	No X Hi	istic epip	edon pr	esent? Ye	s	No <u>X</u>	-	
Is the soil: Mottled? Yes	No G	leyed?	Yes	No 2	<u> </u>			
Matrix Color: 109 P		. Mottle (Colors: _	OKI-10	17			
Other hydric soil indicators:								
Is the hydric soil criterion met? Ye	is <u>*</u> No	0						
Rationale:		(
Low expound - 1	mottles	<u> </u>						
	-	HYDRO						
is the ground surface inundated?	Yes	No X	_ Surfa	ace water o	lepth:			
is the soil saturated? Yes 🕊	No							
Depth to free-standing water in pit/s	oil probe hole	۶: <u>\$ </u>	JE VA	<u> </u>	<u></u>			
List other field evidence of surface i	nundation or	soil satu	ration.					
Is the wetland hydrology criterion m	et? Yes 🗡	e No			1 4 31 1111 111 11 11 11 11 11		•	
OBSERVATION OF S	SATE SATE	TURAT	100	······································				
JURIS	DICTIONAL	DETERM	MATIC	N AND R	ATIONAL	E		
Is the plant community a wetland?	Yes X	No						
Rationale for jurisdictional decision:								
1. This data form can be used for the		lssassmi	ent Proc	edure and	the Plant	Commun	nitv	
- Assessment Procedure.		10001111	-,,,,,,,	,500,0 4,10	raill	n	··· <i>y</i>	•
² Classification according to "Soil Ta	xonomy."							

Is the soil on the hydric soils list? Yes No Undetermined	Field Investigator(s): KCIMAN	<u>~</u>	: /A	Date: 11-3	-04	
Note: if a more detailed site description is necessary, use the back of data form or a field notebook. Do normal environmental conditions exist at the plant community? Yes X No (If no, explain on back) Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes No X (If yes, explain on back) VEGETATION Indicator Status Stratum Dominant Plant Species Status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the plant status Stratum I Planter is grown in a few with the planter is	Project/Site: IACL CHIEF		State: WA	County:	. 	
Yes No (If no, explain on back) Has the vegetation, solis, and/or hydrology been significantly disturbed? Yes No (If yes, explain on back)	Note: If a more detailed site descrip	lion is necessary, us	it Community #/Name e the back of data fo	rm or a field not	ebook.	
Indicator Indi	Yes _XNo (If no, explain Has the vegetation, soils, and/or hyd	on back) rology been significa	•			
Dominant Plant Species Status Plant			TATION			
1. Placer's grandinaris FACW # 11. 2.	Dominant Dinat Consiss		Ďarata a A Dlank Ca			~
12						Stratum
13. 14. 14. 14. 15. 15. 15. 15. 16. 16. 7. 17. 17. 18. 19. 19. 19. 19. 19. 10. 20.						
14. 5. 15. 16. 16. 17. 8. 19. 19. 19. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC Co Vo Is the hydrophytic vegetation criterion met? Yes No No No No No No No N						
5.	3		13			
7. 8. 18. 9. 19. 19. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100% Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls: Solls Histosol? Yes No Undetermined Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No X Matrix Color: 100 K No Mottle Colors: VAR1005 Other hydric soil criterion met? Yes X No Rationale: No X Surface water depth: Is the hydric soil criterion met? Yes X No Depth to free-standing water in pi/soil probe hole: Soll FACE List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SUIL SATURATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale: OBSERVATION OF SUIL SATURATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ACL 3 CATTERIA MET	5		14,			
7. 8. 18. 9. 19. 19. 19. 10. 20. Percent of dominant species that are OBL, FACW, and/or FAC 100% Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls: Solls Histosol? Yes No Undetermined Is the soil on the hydric soils list? Yes No Undetermined Is the soil a Histosol? Yes No Histic epipedon present? Yes No X Matrix Color: 100 K No Mottle Colors: VAR1005 Other hydric soil criterion met? Yes X No Rationale: No X Surface water depth: Is the hydric soil criterion met? Yes X No Depth to free-standing water in pi/soil probe hole: Soll FACE List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SUIL SATURATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale: OBSERVATION OF SUIL SATURATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ACL 3 CATTERIA MET	6		16			
8. 18. 19. 19. 19. 19. 19. 19. 10. 20	7		17.			
9. 19. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20						
Percent of dominant species that are OBL, FACW, and/or FAC	9		19			
Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls						
Is the hydrophytic vegetation criterion met? Yes X No Rationale: Solls	Percent of dominant species that ar	e OBL, FACW, and/	or FAC 100%			
Soils Series/phase:	Is the hydrophytic vegetation criterion	on met? Yes 🔀 🗀	_ No			
Soils Series/phase:	Hationale:	87-60				
Series/phase:	30 % 120 00	01101-			-	
Is the soil a Histosol? Yes No Histic epipedon present? Yes No X Is the soil: Mottled? Yes No Gleyed? Yes No X Matrix Color: 10YR 3/1 Mottle Colors: VARIOUS Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: LOW C HRAMA - MOTTLES HYDROLOGY Is the ground surface inundated? Yes No X Surface water depth: Is the soil saturated? Yes No No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the welland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SULL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a welland? Yes X No Rationale for jurisdictional decision: ACL 3 CRITERIA MET						
Is the soil a Histosol? Yes No Histic epipedon present? Yes No X Is the soil: Mottled? Yes No Gleyed? Yes No X Matrix Color: 10YR 3/1 Mottle Colors: VARIOUS Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: LOW C HRAMA - MOTTLES HYDROLOGY Is the ground surface inundated? Yes No X Surface water depth: Is the soil saturated? Yes No No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the welland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SULL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a welland? Yes X No Rationale for jurisdictional decision: ACL 3 CRITERIA MET	Series/phase:		Subgroup:2.			
Is the soil a Histosol? Yes No X Histic epipedon present? Yes No X Is the soil: Mottled? Yes No Gleyed? Yes No X Mottled? Yes No Mottle Colors: VARIOUS Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: LOW C HRUMA - MOTTLES HYDROLOGY Is the ground surface inundated? Yes No X Surface water depth: Is the soil saturated? Yes No No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the welland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SULL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a welland? Yes X No Rationale for jurisdictional decision: ACL 3 CRITERIA MET	Is the soil on the hydric soils list?	Yes No	Undetermined			
Matrix Color: 104 R 3/1	Is the soil a Histosol? Yes	No X Histic epi	pedon present? Yes	No <u>×</u>		
Other hydric soil indicators: Is the hydric soil criterion met? Yes X No Rationale: Low Chrima - Mottles HYDROLOGY Is the ground surface inundated? Yes No X Surface water depth: Is the soil saturated? Yes No No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SUL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA MET	Is the soil: Mottled? Yes X					
Is the hydric soil criterion met? Yes X No Rationale: LOW CHRIMA - MOTTLES HYDROLOGY Is the ground surface inundated? Yes No X Surface water depth: Is the soil saturated? Yes No No Depth to free-standing water in pit/soil probe hole: List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes X No Rationale: OBSERVATION OF SELL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes X No Rationale for jurisdictional decision: ACL 3 CRITERIA MET		вілом	Colors: VAPIOUS	· · · · · · · · · · · · · · · · · · ·		
Rationale: LOW CHRIMA - MOTTLES		s Y No				
HYDROLOGY Is the ground surface inundated? Yes No Surface water depth: Is the soil saturated? Yes No Depth to free-standing water in pit/soil probe hole: Depth to free-standing water in pit/soil probe hole: Surface water depth: Depth to free-standing water in pit/soil probe hole:	Rationale:	3				
Is the ground surface inundated? Yes No Surface water depth:	LOW CHROMA - M.	>7765				
Is the soil saturated? Yes \ No		HYDR	OLOGY			
Is the soil saturated? Yes \ No	Is the ground surface inundated?	∕es No 🌣	Surface water de	opth:		
List other field evidence of surface inundation or soil saturation. Is the wetland hydrology criterion met? Yes メ No Rationale: OBSERVATION OF SUL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE s the plant community a wetland? Yes メ No Rationale for jurisdictional decision: ALL 3 CRITERIA MET	Is the soil saturated? Yes V	No		•		
Is the wetland hydrology criterion met? Yes \(\sum_{\text{No}} \) No \(\text{No} \) Rationale: \(\text{OBSERVATION OF SUL SATURATION} \) JURISDICTIONAL DETERMINATION AND RATIONALE Is the plant community a wetland? Yes \(\sum_{\text{No}} \) No \(\text{No} \) Rationale for jurisdictional decision: \(\text{ALL 3 CRITERIA MET} \)	Depth to free-standing water in pit/so	il probe hole: <u> </u>	RFACE		·	
Rationale: OBSERVATION OF SUL SATURATION JURISDICTIONAL DETERMINATION AND RATIONALE s the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA MET	List other field evidence of surface in	iundation or soil satt	uration.			
JURISDICTIONAL DETERMINATION AND RATIONALE s the plant community a wetland? Yes X No Rationale for jurisdictional decision: ALL 3 CRITERIA MET	Rationale:					
s the plant community a wetland? Yes X No	OBSERVATION OF SU	IL SATURATI	اما			
Rationale for jurisdictional decision: ALL 3 CRITERIA MET	JURISI	DICTIONAL DETER	AR DNA NOITANIM	TIONALE		•
Rationale for jurisdictional decision: ALL 3 CRITERIA MET	is the plant community a wetland?	Yes X No				
	Rationale for jurisdictional decision:					
	4		ant Procedure and t	he Plant Comm	unity	
	Assessment Procedure.		ione i roccooro and t	no i iam comm	o inj	-

Field Investigator(s):	NM .			Date:t	11-2-64	
Project/Site: TALL CHIEF			State: WA	County: _	KING	
Applicant/Owner: LANG		Plan	t Community #/Nan	ne:		
Note: If a more detailed site descri	ption is nec	essary, us	e the back of data f	orm or a fie	eld notebook.	
Do normal environmental condition Yes X No (If no, explain Has the vegetation, soils, and/or hy Yes No (If yes, explain	n on back) drology bea	en significa	·			
			ТАПОН		المانية	
Dominant Black Consider	Indicator		Dominant Black St	nacion	Indicator Status	_
Dominant Plant Species	Status		Dominant Plant Sp			Stratum
1. Acer macrophyllu- 2. Rubus discolor	1 PACO		11. ———		·····	
2. 2505 0150001	FACU		12			
3. Phalaris Grundinares						
4			14			
5	•	;	15			
6			16			
7			17. ———			
8.						
9.						
10			20.	0,		
Percent of dominant species that a is the hydrophytic vegetation criter	are OBL, FA ion met?	ACW, and/ Yes	or FAC	/0		
Rationale:					*	
NOT > 50% FA	C OR 1	WETTER				
		sc	ILS			
Carias/abasa:			Subgroup:2			
Series/phase:	V	LI.	Subgroup:-			
Is the soil a Histosol? Yes	tes	INO		J	10. \C	
Is the soil: Mottled? Yes	No A	Claved3	Von Mo	S '	40 <u>X</u>	
Matrix Color: 1018 2/2	140 <u>X</u>	Mottle	Colore:	<u>~</u>		
Other hydric soil indicators:		14101116	O01013.			
Is the hydric soil criterion met? Y		No Y				
Rationale:			•			
CHROMA OF 2	WITHOUT	MOTTL	E5			
		HYDR	OLOGY			
Is the ground surface inundated?	Yas	No ×	Surface water o	feoth:		
Is the soil saturated? Yes	No ×			торин. ——		
Depth to free-standing water in pit/						
List other field evidence of surface			uration.	-		
Is the wetland hydrology criterion in Rationale:	_					
NO OBSERVATION	or Evi	DENCE	OF SOIL SATE	MATIUN	or pom	0770
JURIS	DICTIONA	L DETER	MINATION AND R.	ATIONALE	E	
Is the plant community a wetland?	Yas	No X				
Rationale for jurisdictional decision		_ '*'				
Rationale for jurisdictional decision NO (FITELA M	ET					
	_	·	A D	1 AL - DI	^	
1 This data form can be used for the Assessment Procedure.	e Hydric So	II Assessn	ient Procedure and	ine Plant	Community	-
	2 Y O O O O O ' ' '					
² Classification according to "Soil T	anullulliy.					